

SRC-1600

Touch Screen Remote Control



User Manual

050120

Preface

About this manual

This manual is designed to make using the SRC-1600 Touch Screen Remote Control as easy as possible. Information in this document has been carefully checked for accuracy; however, no guarantee is given to the correctness of the contents. The information in this document is subject to change without notice.

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Chapter 1 Introducing the SRC-1600

Congratulations on purchasing the SRC-1600 Touch Screen Remote Control. The SRC-1600 is a digital universal remote control that is easy to use and enables you to control all your electronic devices equipped with an infrared (IR) remote.

The SRC-1600 has an user-friendly touch screen panel. You can control up to six devices, including VCRs, DVDs, TVs, and satellite receivers.

You can quickly configure the SRC-1600 for each device in your household or office, using the innovative "learning eye" feature. The advanced macro function enables you to initiate a chain of up to 60 commands with the touch of a single key.

Easy to use, the SRC-1600 provides you with a complete central control solution.

NOTE: This manual helps you learn how to use the advanced features of the SRC-1600. It does not explain how to use the functions for your devices. Please refer to your device's user manual for information related to your device.

SRC-1600 Features

- Macro sequence function—each macro can store 60 commands
- Controls up to six devices, including DVDs, TVs, Satellite Receivers, VCRs and other infrared remote control devices
- IR code learning from existing remote controls for quick configuration
- Preset manufacturer's codes for many models
- Up to 44 user-programmable keys for each device
- Automatic Power Saving mode turns off the remote after 90 seconds of inactivity

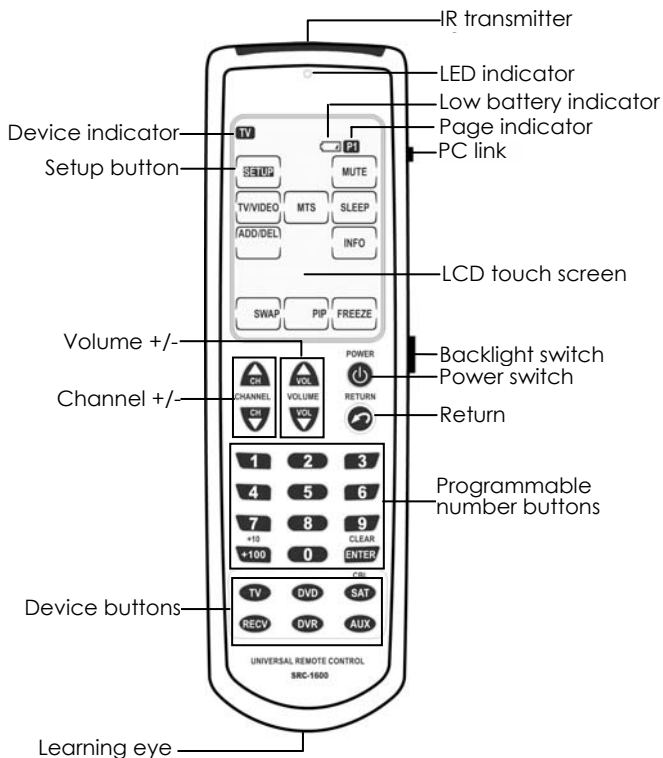
Unpacking the SRC-1600

Check the package to make sure the following items are included.

- SRC-1600
- User Manual
- Pre-programmed Code List

If any of these items are missing or damaged, contact your dealer immediately. Do not throw the packaging in case you need to ship your SRC-1600.

About the SRC-1600



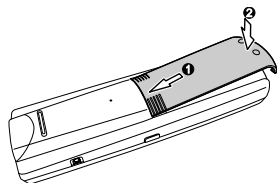
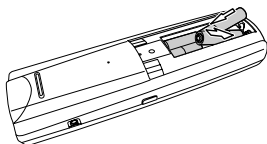
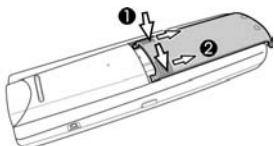
Chapter 2 Quick start

This chapter provides you with the information to quickly start using the SRC-1600.

Installing batteries

The SRC-1600 requires four AAA alkaline batteries (not included). You must insert the batteries before you can operate the SRC-1600.

1. Turn the remote over, gently press the cover in and open in the direction of the two arrows by your thumbs, according to the illustration.
2. Insert the batteries, observing correct polarity.
3. Insert the tabs into place and push the cover closed.



Battery Indicator

A battery icon is displayed in the upper left-hand corner above the **Mute** button.



When the batteries are almost discharged, the battery low icon appears.

Battery Tips and Precautions

- Pay attention to the batteries when the battery half full icon appears and replace batteries if needed.
- The SRC-1600 does not lose programmed data when batteries are replaced.
- Always use fresh batteries. Alkaline batteries are recommended. Do not mix different types of batteries.
- Do not expose the batteries to excessive heat or naked flame.
- Keep batteries out of the reach of children.
- Weak batteries reduce the effective distance of the unit.
- Remove the batteries if the SRC-1600 will not be used for a long period.
- To reduce danger of leakage, remove batteries that are more than two years old.

About the controls

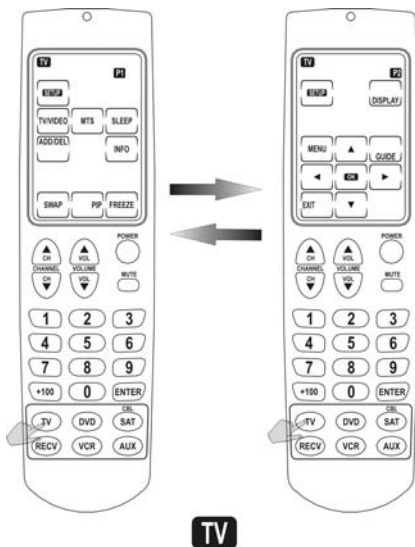
The number of soft buttons on the touch screen changes according to the selected device. The touch screen soft buttons allow you to operate the SRC-1600 and your external devices. Use these keys to program codes from your existing remotes, control your devices, and set up macros. You will hear a beep when you press a button. The SRC-1600 turns itself off after 90 seconds of inactivity.

Touch screen precautions

- Tap the LCD touch screen gently. Do not use excessive force.
- Do not use pens or sharp objects to tap the screen, as you might damage the surface.
- Keep the SRC-1600 dry. Wipe off any spills immediately. Never immerse it in liquid.
- Do not expose the SRC-1600 to extreme temperatures. Keep it away from heat sources.
- Avoid dropping the SRC-1600.
- Do not drop anything on the touch screen.
- Clean the LCD touch screen with a soft, damp cloth. Do not use abrasives or cleaning solutions.


Selecting devices and pages



You can program the hard buttons as well as two pages of soft buttons (on the touch screen) for up to six devices. To change between devices, press the appropriate device button. To switch between pages, press the device button again. The current page is indicated by **P1** or **P2** in the top right corner of the touch screen.

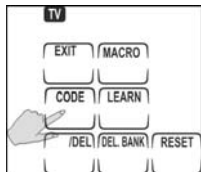






Loading preset codes using auto search

You can quickly start using your SRC-1600 by using the auto search to load preset codes.

1. Switch on the device for which you want to set up the SRC-1600.
2. Select the appropriate device on the SRC-1600 using the device buttons. See Selecting devices and pages on page 7.
3. Press and hold  for two seconds to enter setup on the touch screen.

4. Press .
5. Point the IR transmitter of the SRC-1600 at the device then press .



6. The SRC-1600 will try to turn off the device by transmitting different preset IR codes. When the device switches off, immediately press any hard button or touch the screen.
7. Ensure that you have the correct code by pressing Volume +/-, Channel +/- or  to test. If the code is not correct, press " " or " " and test the code again.
8. Press the  button to save and exit.


NOTES:

- You can stop the auto search at any time by pressing any button.
- The codes for your device may not be included in the preprogrammed list. If the device does not switch off in six minutes, you may not be able to use preset codes. You can program the SRC-1600 using the learning function. See Learning codes on page 15.

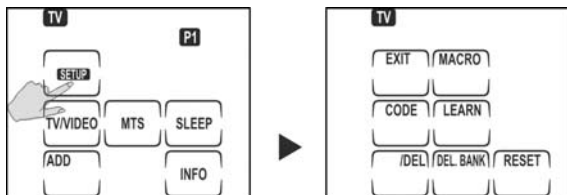
Chapter 3 Setting up the SRC-1600

Before you can use the SRC-1600, you must set it up either by using preset codes or learning codes from your existing IR remote controls.

Entering setup

To enter setup, press and hold the  button for two seconds. From the setup screen, you can

- Setup preset codes
- Learning codes
- Creating Macros
- Delete key codes
- Delete devices codes
- Reset the SRC-1600

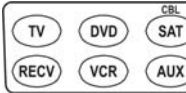

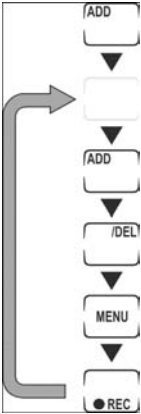





NOTES:

When the battery low icon appears, you will not be able to enter setup. Please renew batteries to entering setup.

Changing the LCD layout



You can customize the LCD layout to match the remote control supplied with your devices.

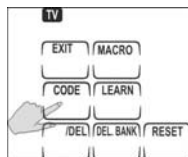
1. Press and hold for two seconds the device button of the device you want to customize. You will see the device icon flashing on the touch screen.
2. Press the buttons on the touch screen to change the LCD layout. As you press the button repeatedly, the various labels for the button appear. You can also choose to leave the button blank. When the border disappears, the button is off. Press and hold  button at any time to display all buttons and labels.
3. Press  after changing the layout.
4. Press  to save the changes or press  to discard them.



Using preset codes

This is the fastest way to program the SRC-1600 but requires that your device be located in the Pre-programmed Code List that was bundled with the SRC-1600. The SRC-1600 comes pre-programmed with a list of preset codes. Check the supplied code list to see if your device is supported. Some newer or less common devices may not be pre-programmed and their codes must be learned using the learning function of the SRC-1600. See Manually setting preset codes on page 13.

Manually setting preset codes

1. Find your device in the supplied list of preset codes.
2. Press and hold  to enter setup.
3. Press .
4. Find the digit code number from the pre-programmed code list.



5. Use the number buttons to enter the four digit code.
(Refer to the pre-programmed code list table.) After you enter the last digit, a double beep sounds, confirming the code has been input. If the number isn't in the code data base, the SRC-1600 will beep three times continuously. Please try another number.
6. Check you have entered the correct code by pressing Volume +/-, Channel +/- or .
7. If the code is correct, press  to confirm and exit. If the code is not correct, repeat step 4. See Checking the code number on page 14



Checking the code number

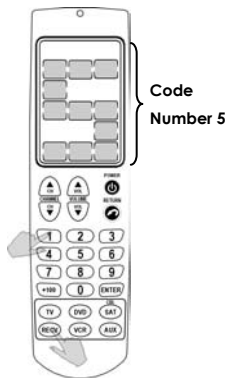
After automatically setting a preset code, you can find the code's number using the following procedure. This is useful if your settings are accidentally erased in the future.

1. Press and hold the appropriate device button.
2. While holding the device button, press and hold the "1" button. The first digit of the IR code number displays.


You can write the code number down in order to program it next time.

3. Repeat this by pressing 2, 3, and 4 for the second, third and fourth digits of the code number.



You can use this code number to program the SRC-1600 if your settings are changed or accidentally erased. See Manually setting preset codes on page 13.

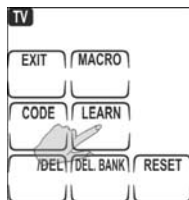


Learning codes

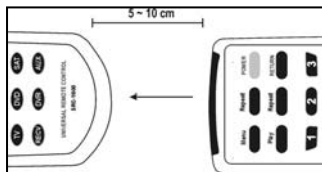
If your device is not in the list of preset codes, you can use your existing IR remote control to “teach” the SRC-1600. You can program all buttons except for  and the **DEVICE** keys.

NOTE: Not all codes can be learned. If the SRC-1600 cannot learn a code, three beeps are emitted.

1. Set both remotes on a flat surface with the target device's remote control pointed at the SRC-1600's learning eye, for about 5 ~10 cm apart.
2. On the SRC-1600, press the device button of the device you want to program.
3. Press and hold  to enter setup.
4. Press .
5. On the SRC-1600, press the button to indicate the key you want to program. Including Touch screen buttons and hard buttons. Touch screen buttons flash when you select them. Press the device button to switch between touch screen pages.




- Aim the IR transmitter of your device's remote control at the learning eye of the SRC-1600.



- Continually press the corresponding button on your existing remote control until the SRC-1600 LED lights.

If the function is not learned correctly, the LED flashes three times and the SRC-1600 emits a triple beep. Do the relearning procedure again.

- When the code has been learned, the SRC-1600 emits a beep and the LED on the SRC-1600 lights until you release the button on the device's remote.
- Repeat steps 5 – 8 for all the buttons you want to program.
- When you have finished, press .

NOTES:

- Programming a button overwrites any previous function.
- When the SRC-1600 has successfully learned a function it beeps once and the LED lights up until you release the remote control's button.

Deleting codes

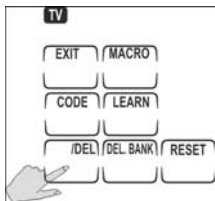
You can delete codes if you no longer want to use the function or if you want to reprogram a button. You can delete codes one button at a time or an entire device at a time.

NOTES:

- Deleting codes does not remove the button from the layout.
- You do not need to delete a code to reprogram a button. You can overwrite codes by automatically or manually entering preset codes or by learning from an existing remote control.

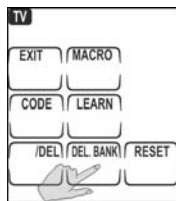
Deleting codes one button at a time

1. Select the appropriate device by pressing the device button.
2. Press and hold **SETUP** to enter setup.
3. Press **DEL**.
4. Press the button you want to delete.
5. Repeat step 4 for all the buttons you want to delete.
6. Press **EXIT**.



Deleting codes one device at a time

1. Select the appropriate device by pressing the device button.
2. Press and hold **SETUP** to enter setup.
3. Press **DEL BANK**.
4. Press **ENTER** to confirm. Otherwise, press **EXIT** to cancel.
5. To delete other devices, repeat steps 1 ~ 3. Otherwise, press **EXIT** to leave this mode.

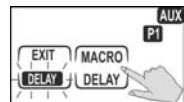
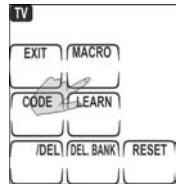





Creating Macros

A macro is a sequence of commands. The Macro feature enables you to send a sequence of up to 60 commands by pressing a single button. The macro can also include delays.

NOTE: Assigning a macro to any button overwrites any previous function.

1. Select the appropriate device by pressing the device button.
2. Press and hold **SETTING** to enter setup.
3. Press **MACRO**.
4. Press the button to which you want to assign the macro. A double beep sounds to indicate macro mode.
5. Press the buttons in the sequence of your commands for a Macro.
If necessary, to insert a delay by press **MACRO**/**DELAY**. **DELAY** flashes in the **EXIT** button. Press the desired delay (in seconds) on the number buttons. For example, for a three second delay press **3**.
6. When you have completed the macro, press **EXIT**.





7. Press  to confirm or  to discard the macro. The button's original function will be preserved.
8. To set another macro, repeat steps 3 ~ 7.
9. After you have finished setting macros, press  to leave this mode.

NOTES:

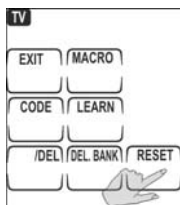
- Each macro can store up to 60 commands, including delays. When the macro is full, you cannot enter any more commands. If you try to enter more commands, a triple beep will sound.
- You can delete macros in the same way as you would buttons. See Deleting codes on page 17.

Resetting factory defaults

Resetting factory defaults deletes all functions and restores them to the original factory setup. You will lose all macros and user-defined buttons. Resetting defaults cannot be undone.

1. Press and hold  to enter setup.
2. Press and hold  for four seconds.

The touch screen goes blank and the LED lights up. The reset process is complete.



Chapter 4 Using the SRC-1600

Use the SRC-1600 as you would any IR remote control by pointing it at the device you want to control and pressing the appropriate button.

Buttons which are correctly programmed using the preset codes or learning feature emit a single beep when pressed and the LED lights up briefly. If the button that do not have a function in it, the LED does not light.

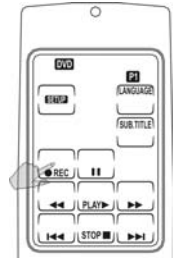
NOTE: Refer to the user manuals supplied with your devices for information related to the functions of those devices.

Button protection

The SRC-1600 has a protection feature to prevent accidental operation of the touch screen and buttons. When something presses on the buttons accidentally, SRC-1600 will automatically stop to send the IR codes after 15 seconds. In this state, the touch screen also turns off after 90 seconds.

Record button protection

The SRC-1600 has a protection feature to prevent accidental recording of videotapes, hard disks or DVDs. The record button must be pressed for two seconds to begin recording.

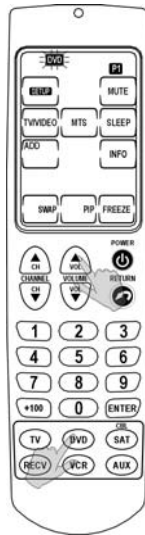


NOTE: This only applies to the record button. If you program another button to record, this safety feature will not work for that button.

Punch thru

The punch thru function enables you to access the VOL +/- controls of the TV or RECV device without having to switch to that device. For example, while you are watching a DVD you can adjust the volume of your TV using punch thru.

1. Press and hold the device button of the device you are currently operating.
2. While holding the device button, press the VOL + or VOL- button. The device icon flashes on the touch screen.
3. While the device icon is flashing, quickly press TV or RECV within three seconds.
4. Punch thru has successfully completed. When punch thru has been set, the TV or RECV icon will flash next to the device icon of the device you are operating to indicate the volume control source.



NOTE:

- To remove the punch thru function, press the device button and Volume+ or Volume - together.
- The punch thru function can only be set with the DVD, VCR, SAT, and AUX devices, and enables you to control the volume of these sources through the TV or RECV device.

Auto power-off

To save power, the SRC-1600 automatically powers off after 90 seconds.

Wake up sensor

The SRC-1600 also has an internal motion detector. You can turn it on again by moving the SRC-1600 or press any key on it.

Backlight


The SRC-1600 has a blue backlight to make using it in the dark room easily. Press the backlight switch to switch on the backlight. The backlight will switch off automatically 8 seconds after the last button is pressed.

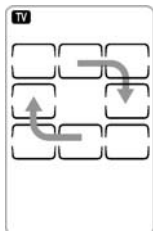
Chapter 5 Miscellaneous settings

Using the optional accessories (see Optional Accessories on page 28) you can copy settings to and from another SRC-1600 to your own SRC-1600, as well as backup your settings, update the preset code database, and upgrade the firmware.

Using the transmission feature

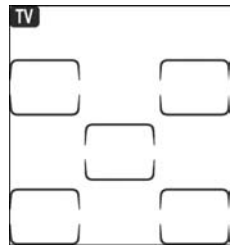
Using the optional SLC-2080 transmission cable, you can copy settings from one SRC-1600 to another.

1. Connect two SRC-1600s using the transmission cable.
2. Press and hold  to enter setup.
3. Press **8** on the number pad from the source remote control three times.
If the transmission is successful the LCD displays the right side pattern:



If the transmission was unsuccessful, the SRC-1600 emits three beeps and the LCD displays the right side pattern.

Press any key to exit, then repeat step 3 to retransmit the data.



NOTE: Make sure to transmit the data from a source SRC-1600 that has been programmed correctly.

Appendix

Specifications

Model	SRC-1600
Capacity	6 devices in one
Dimensions(W x H x D)	58 mm x 198 mm x 28 mm
Weight (W/O batteries)	160 g
Buttons	44 programmable buttons + 6 device buttons + backlight button
Backlight	Blue LED
IR operating distance	8 ~ 10 meters
Learning frequency	20KHZ-455KHZ & Pulse up to 256 bits long
Memory	512 KB flash memory
Batteries	4 x AAA 1.5 V (SUM-4)
Power consumption	Operation: 30 ~120 mA (max) LCD on: 150 μ A LCD off: 20 μ A

Optional accessories



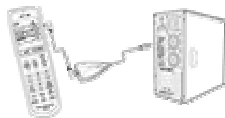
USB Cable



Transmit Cable

The SLC-2080 is an optional USB cable that enables transmission of system setup between a PC and the SRC-1600. With the Transmit Cable, the SRC-1600 also can duplicate the user setup data from one unit to another.

Upgrade Tools: With the “Upgrade Tools”, users can upgrade the MCU program and Pre-programmed Codes.



Please refer to “SLC-2080 User Manual” for more information.

Duplicate: By connecting a “Transmit Cable” between two SRC-1600s, you can duplicate settings and functions from one SRC-1600 to another.



“SLC-2080 USB driver” & “Upgrade Tools” software are included in the CD package or can be downloaded free from:

www.sun-wave.com

Troubleshooting

Problem	solution
Touch screen does not display anything when touched.	<ul style="list-style-type: none">*Check the batteries are installed correctly.*The batteries may be discharged. Replace the batteries as described in Installing batteries on page 4.
The SRC-1600 does not operate a device.	<ul style="list-style-type: none">*Check the correct device is selected on the SRC-1600.*Make sure you are using the SRC-1600 within the effective transmission distance. (8 ~ 10 m)*The batteries may be discharged. Replace the batteries as described in Installing batteries on page 4.*Check that the button is programmed correctly. Re-program the button as described in page 4.*Go to Sunwave's website, www.sunwave.com.tw and download the most up to date code list.

Problem	solution
<p>The SRC-1600 cannot operate a device after learning a function.</p>	<ul style="list-style-type: none">*Check the SRC-1600 has learned the function correctly. (See P15)*Delete the code and teach the SRC-1600 again. (See P17, P15)*Check you used the correct remote to teach the SRC-1600.*The SRC-1600 cannot learn all codes. Some remote's frequency might out of the learning range. You may not be able to program the SRC-1600 for some devices or functions.
<p>The SRC-1600 emits three beeps when learning a function.</p>	<ul style="list-style-type: none">*Check the remote is correctly aimed at the SRC-1600's learning eye and you are holding the remote's button until the function is learned.*Check the remote's IR transmitter is 5 ~ 10 cm from the SRC-1600's learning eye.

Problem	solution
The LED does not light up when you press a button.	<ul style="list-style-type: none">*The LED does not light up when the button doesn't have a function in it. Please input an IR codes init.*Check the button that you pressed has been programmed the code in it.
The VCR, Hard disk recorder, or DVD will not record.	<ul style="list-style-type: none">*The record button has a safety feature to prevent accidental operation. Press and hold the record button for two seconds.
Cannot transmit between two SRC-1600s (using the optional SLC-2080 cable).	<ul style="list-style-type: none">*Check the batteries in both remotes and with sufficient power.*Make sure the cable is connected properly with every connection.
Learning does not work?	<ul style="list-style-type: none">*The batteries may be discharged. Replace the batteries as described in Installing batteries on page 4.*Check the target device's remote is correctly aimed at the SRC-1600's learning eye and keep distance between remotes to about 5~10 cm.

Problem	solution
	<p>*Check you are holding the target remote's button until the LED lights up to confirm this function is learned.</p> <p>*Do not teach the SRC-1600 near incandescent lights.</p> <p>*Sometimes the code's frequency is out of the learning range. The SRC-1600 cannot learn all codes. You may not be able to program the SRC-1600 for some devices or functions.</p>
Macro does not work.	<p>*Check the correct device is selected on the SRC-1600. Check you are using the SRC-1600 within the effective transmission distance (8 ~ 10 m)</p> <p>*The batteries may be discharged. Replace the batteries as described in Installing batteries on page 4.</p> <p>*Check that the macro is programmed correctly. Re-program the macro as described in Creating Macros on page 19.</p>

Problem	solution
A button on your existing remote performs two or more functions.	*Some remotes issue multiple codes when a single button is pressed. Teach separate buttons on the SRC-1600 for these different codes.
The touch screen turns off.	*The SRC-1600 has a power-saving feature and switches off automatically after 90 seconds of inactivity. To switch it back on again, please move the SRC-1600. * The batteries may be discharged. Exchange the new batteries for SRC-1600.